

II. AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An antioxidant composition comprising:
a flavonoid selected from the group consisting of a flavone, a flavonol, an isoflavone, an isoflavonol, an analogue thereof, a pharmaceutically acceptable salt thereof, and a ~~mixture~~ mixture thereof; and
a mixture of at least two forms of vitamin E selected from the group consisting of alpha, beta, delta, epsilon, gamma, zeta, eta, xi1, xi2, and sigma tocopherols, and alpha, beta, delta and gamma tocotrienols, and derivatives thereof;
bush plum;
green tea extract; and
grape skin extract;
wherein the flavonoid and mixture of vitamin E forms are primary ingredients and the primary ingredients are present in the composition in an amount of from 30% to 85% by weight;
wherein the bush plum, green tea extract, and grape skin extract are secondary ingredients and the secondary ingredients are present in the composition in an amount of from 15% to 70% by weight; and
wherein the ~~ratio of~~ flavonoid to and the mixture of vitamin E forms is are present in the composition in a weight ratio of from 40/60 to 90/10 percent by weight.

Claims 2-4. (Cancelled).

5. (Currently Amended) The antioxidant composition of Claim 1 ~~Claim 3~~ wherein the primary ingredients are present in the composition in an amount of 82% by weight.

Claims 6-7. (Cancelled).

8. (Currently Amended) The antioxidant composition of ~~Claim 6~~ Claim 1 wherein the secondary ingredients are present in the composition in an amount of 18% by weight.

Claim 9. (Cancelled).

10. (Currently Amended) The antioxidant composition of ~~Claim 9~~ Claim 1 wherein the grape skin extract and green tea extract are present in the composition in a weight ratio of from 60/40 to 80/20 percent.

11. (Currently Amended) The antioxidant composition of Claim 10 ~~further comprising wherein the bush plum is present in the composition~~ in an amount of 2% by weight ~~of the composition~~.

12. (Currently Amended) The antioxidant composition of Claim 1 wherein the flavonoid is a flavonol and the flavonol is selected from the group consisting of quercetin, kaempferol, myricetin, ~~an analogue~~ analogues thereof, a pharmaceutically acceptable ~~salt~~ salts thereof, and a ~~mixture~~ mixtures thereof.

13. (Original) The antioxidant composition of Claim 12 wherein the flavonol is quercetin.

14. (Original) The antioxidant composition of Claim 1 wherein the vitamin E forms are selected from the group consisting of alpha, beta, delta, and gamma tocopherol.

15. (Currently Amended) An antioxidant composition comprising quercetin, a mixture of alpha, beta, delta, and gamma tocopherols, grape skin extract, green tea extract, and bush plum wherein the quercetin and the mixture of tocopherols ~~comprise between~~ are present in the composition in an amount of from 12.1% to 100% by weight of the composition and ~~wherein the quercetin and mixture of tocopherols are present~~ in a weight ratio of from 40/60 to 90/10 percent.

16. (Currently Amended) The antioxidant composition of Claim 15 ~~having~~ wherein the weight ratios of the quercetin, the mixture of tocopherols, the grape skin extract, the green tea extract, and the bush plum are 49/33/9.5/6.5/2 percent, respectively.

17. (Original) The antioxidant composition of Claim 15 wherein the composition has an antioxidant activity of at least 10,000 micromoles Trolox equivalent units per gram, using an ORAC(o) oxygen uptake measuring assay.

18. (Currently Amended) The antioxidant composition of Claim 1 further comprising a carrier comprising gum acacia, xanthan gum, gum tragacanth, gum ghatti, and aloe vera gel extract; wherein the primary ingredients and the secondary ingredients are present in the composition and carrier have in a weight ratio of 1:2, with respect to the carrier.

19. (Currently Amended) The antioxidant composition of Claim 18 wherein the carrier comprises gum acacia, xanthan gum, gum tragacanth, gum ghatti, and aloe vera gel extract in a weight ratio of 30/30/20/19/1 percent, respectively.

20. (Original) The antioxidant composition of Claim 18 wherein the composition is roller-compacted.

21. (Currently Amended) The antioxidant composition of Claim 15 further comprising a carrier comprising gum acacia, xanthan gum, gum tragacanth, gum ghatti, and aloe vera gel extract; wherein the quercetin, the mixture of tocopherols, the grape skin extract, the green tea extract, and the bush plum are present in the composition and carrier have in a weight ratio of 1:2 to 2:1, with respect to the carrier.

22. (Currently Amended) The antioxidant composition of Claim 16 further comprising a carrier comprising gum acacia, xanthan gum, gum tragacanth, gum ghatti, and aloe vera gel extract in a weight ratio of 30/30/20/19/1 percent, respectively; wherein the quercetin, the mixture of tocopherols, the grape skin extract, the green tea extract, and the bush plum are

present in the composition and carrier have in a weight ratio of 1:2 to 2:1 with respect to the carrier and wherein the composition is roller-compacted.

23. (Withdrawn) A method for measuring antioxidant activity of a test sample having water and lipid soluble ingredients by measuring oxygen uptake, comprising:

combining an oxidizable target molecule and the test sample in a solvent of acetone/water/detergent to form a test mixture at 37 °C under conditions where oxygen is present in equilibrium with air;
adding an azo radical initiator to the test mixture; and
measuring area under an oxygen uptake curve of the test mixture to provide a measure of the antioxidant activity of the test sample.

24. (Withdrawn) The method of Claim 23 further comprising:

combining an oxidizable target molecule and a solvent of acetone/water/detergent to form a control mixture at 37 °C under conditions where oxygen is present in equilibrium with air;
combining an oxidizable target molecule and Trolox in a solvent of acetone/water/detergent to form a standard mixture at 37 °C under conditions where oxygen is present in equilibrium with air;
adding an azo radical initiator to the control mixture, and to the standard mixture;
measuring area under an oxygen uptake curve of the control mixture, and the standard mixture; and
determining antioxidant activity in Trolox equivalents to provide a measure of the antioxidant activity of the test sample.

25. (Withdrawn) The method of Claim 23 wherein the test sample comprises water soluble ingredients.

26. (Withdrawn) The method of Claim 23 wherein the test sample comprises lipid soluble ingredients.

27. (Withdrawn) The method of Claim 23 wherein the oxidizable target molecule is linoleic acid.
28. (Withdrawn) The method of Claim 23 wherein the acetone/water/detergent is in a 1:1:1 volume ratio.
29. (Withdrawn) The method of Claim 23 wherein the azo radical initiator is AAPH.
30. (Withdrawn) The method of Claim 23 wherein oxygen uptake is measured with an oxygen electrode.
31. (Withdrawn) A method of measuring stability of an antioxidant composition over time, the composition having water and lipid soluble ingredients, by measuring oxygen uptake of the composition at a first time point and at a second, later, time point, comprising :
- combining an oxidizable target molecule and the antioxidant composition in a solvent of acetone/water/detergent to form a test mixture at 37 °C under conditions where oxygen is present in equilibrium with air;
 - adding an azo radical initiator to the test mixture; and
 - measuring area under an oxygen uptake curve of the test mixture to provide a measure of the antioxidant activity of the antioxidant composition at the first time point and at the second time point;
- wherein a difference between the area under the oxygen uptake curve for the first time point and the area under the oxygen uptake curve for the second time point is a measure of stability of the antioxidant composition over time.
32. (Withdrawn) A process of formulating an antioxidant composition having time release and increased shelf life, comprising:
- blending the antioxidant composition of Claim 1 with a carrier comprising gum acacia, xanthan gum, gum tragacanth, gum ghatti, and aloe vera gel extract in a weight

- ratio of 30/30/20/19/1; wherein the composition and carrier have a weight ratio of 1:2 to 2:1 to form a blend;
- roller compacting the blend to form a compact;
- milling the compact to form a granulation; and
- forming the granulation into a dosage form.
33. (Withdrawn) The process of Claim 32 wherein the weight ratio of antioxidant composition to carrier is 1:2 and the dosage form is 500 mg.
34. (Withdrawn) A process of increasing the shelf life of an antioxidant formulation comprising:
- combining the antioxidant formulation and a carrier comprising gum acacia, xanthan gum, gum tragacanth, gum ghatti, and aloe vera gel extract in a weight ratio of 30/30/20/19/1; wherein the composition and carrier have a weight ratio of 1:2 to 2:1 to form a blend; and
- roller compacting the blend to form a compact.
35. (Withdrawn) A method of increasing serum antioxidant activity of an individual comprising administering 500 mg to 1 g of the antioxidant composition of Claim 22 per day to the individual.